

Application No. 09/964,215
Amendment dated October 21, 2003
Reply to Office Action of October 6, 2003

Atty Dkt No. 7610-0001.25

LISTING OF THE CLAIMS

1. (Original) A method for generating an array of molecular moieties on a porous substrate surface divided into a plurality of discrete surface sites, the method comprising applying focused acoustic energy to each of a plurality of a reservoirs each containing a molecular moiety in a fluid, wherein the focused acoustic energy is applied using an acoustic ejector comprised of an acoustic radiation generator and a focusing means in a manner effective to eject a droplet from each reservoir toward the substrate surface such that the molecular moiety in each droplet attaches to a localized region within a different surface site.
2. (Original) The method of claim 1, wherein each molecular moiety is different.
3. (Original) The method of claim 2, wherein a droplet is ejected toward each surface site, such that every surface site has a molecular moiety attached thereto.
4. (Original) The method of claim 3, wherein each molecular moiety is different.

5. (Original) The method of claim 1, wherein the molecular moieties are biomolecules.
6. (Original) The method of claim 5, wherein the biomolecules are nucleotidic.
7. (Original) The method of claim 6, wherein the biomolecules are oligonucleotides.
8. (Original) The method of claim 7, wherein the biomolecules are nucleotidic monomers, and the method further comprises stepwise synthesis of an oligonucleotide within each surface site by repeated deposition of individual nucleotidic monomers at each site using focused acoustic energy.
9. (Original) The method of claim 5, wherein the biomolecules are peptidic.
10. (Original) The method of claim 3, wherein the porous substrate surface is comprised of at least 62,500 discrete surface sites.

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11. (Original) The method of claim 10, wherein the porous substrate surface is comprised of at least 250,000 discrete surface sites.

12. (Original) The method of claim 11, wherein the porous substrate surface is comprised of at least 1,000,000 discrete surface sites.

13. (Original) The method of claim 12, wherein the porous substrate surface is comprised of at least 1,500,000 discrete surface sites.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)